

REMARKS/ARGUMENTS

Claims 1-16 are currently pending. Claims 1, 5, 9 and 13 have been amended. Claims 17-20 are withdrawn. Applicants respectfully request entry of this amendment based on the following remarks.

Rejection under 35 USC 112, second paragraph

The Examiner rejected claims 1-16 as being indefinite.

Claims 1 and 9 have been amended to clarify that the fusion protein is cleaved at the intein cleavage site, so as to release the cleavable intein from the fusion protein, leaving a remaining portion of the fusion protein. These claims now also specify that the ligand is attached to the remaining portion of the fusion protein at the newly generated terminus of the remaining portion.

Support for this amendment can be found at least at paragraphs 0025, 0028 and 0053-0055 and in Figure 1 of the application as originally filed. The specification indicates that in the exemplified embodiment the intein only undergoes the first step of cleavage, thus forming a thioester bond in fusion protein. In the described embodiment, the intein is cleaved from the upstream portion of the fusion protein by addition of the cysteine-biotin ligand that has a free thiol group that attacks the thioester bond, which defines the interface between the upstream portion and the cleavable intein, resulting in addition of the cysteine-biotin to the upstream portion of the fusion protein via a new thioester bond and release of the downstream intein portion of the fusion protein. This mechanism is depicted in Figure 1.

Claims 5 and 13 have been amended to indicate that the ligand is cysteine-biotin. Support for this amendment is found at least in paragraphs 0028 and 0029 of the application as originally filed.

It is believed that claims 1, 5, 9 and 13 as amended are definite. The remaining claims, 2-4, 6-8, 10-12 and 14-16 depend from these claims, and are also definite. Applicants respectfully request withdrawal of the rejection under 35 USC 112 second paragraph.

Rejection under 35 USC 102(a)

The Examiner rejected claims 1-3, 9 and 10 as anticipated by Lesaicherre, et al.

Initially, applicants have concluded that there is an error in inventorship in this application. In particular Mahesh Uttamchandani was incorrectly listed as an inventor as a result of error and without deceptive intent. Thus the correct inventors are Marie-Laure Lesaicherre, Yee Peng Rina Lue, Y.J. Grace Chen, and Shao Qin Yao. Applicants will submit a request to correct the inventorship pursuant to 37 CFR 1.48, once the appropriate declarations and statements have been executed.

Applicants Marie-Laure Lesaicherre, Yee Peng Rina Lue, Y.J. Grace Chen, and Shao Qin Yao submit that they are the sole inventors of the subject matter described and claimed in the pending application and also disclosed in the cited Lesaicherre, et al. article. Applicants aver that co-author Qing Zhu listed on the article did not contribute to the conception of the claimed invention. A declaration in support will be filed along with the documents requesting the change in inventorship.

Thus the Lesaicherre, et al. article describes the inventors' own work. So the claimed invention was not known or used by others in this country or described in a printed publication in this or a foreign country before the invention thereof by the Applicants. *In re Katz*, 215 USPQ 14 (CCPA 1982), M.P.E.P. § 2132.01.

Applicants respectfully request withdrawal of the rejection under 35 USC 102(a).

Rejection under 35 USC 103

The Examiner rejected claims 5-16 as obvious having regard to the Lesaicherre, et al. reference in view of one or more of Duan, Cass, et al., and Nygren, et al.

Given that the Lesaicherre, et al. reference is not citable under 35 USC 102, Applicants respectfully submit that the grounds for this rejection are moot. Applicants respectfully request withdrawal of this rejection.

It is believed that no new matter has been added by these amendments.

In view of the foregoing, the application is in condition for allowance. Applicants respectfully request entry of this amendment and allowance of the application.

Respectfully submitted,

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